



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,611	10/07/2003	Richard M. Lum	Lum 6-11-9-8	5769

7590 09/27/2005

Docket Administrator (Room 3J-219)  
Lucent Technologies Inc.  
101 Crawfords Corner Road  
Holmdel, NJ 07733-3030

EXAMINER

HOFFMANN, JOHN M

ART UNIT PAPER NUMBER

1731

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/680,611

Applicant(s)

LUM ET AL.

Examiner

John Hoffmann

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-22 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-22 and 24-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 23 August 2005 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-22 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heitmann 5609666 in view of Fleming 5221306 and Suto 4367085 and optionally in view of Berkey 5917109 and Jaeger 3865564.

See how the references were applied previously.

Jaeger can also be applied for teaching that constant diameter fibers is necessary for low-loss transmission fiber (col. 1, lines 13-18). Clearly, it would be

Art Unit: 1731

easier to create constant diameter fibers by starting out with constant diameter ~~(final, sintered)~~ preforms.

As pointed out by Applicant, Fleming's measurements are not diameters, rather they are distances from the core. It would have been obvious to have the core as symmetrical/cylindrical as possible – ideally as symmetrical as the cladding. Since Fleming teaches that symmetry is important, it would have been obvious to make the symmetry as best possible. Fleming clearly shows that high symmetry is possible.

As to the new claims which require a specific variations: it would have been obvious to have the variations as small as possible – so as to maximize the known benefits.

Claims 18-22 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berkey 5917109 alone or in view of Koenig 5314517, Imoto 4123242 and Karbassiyoan 4597785 and Jaeger 3865564.

See how the references were applied previously.

Jaeger can also be applied for teaching that constant diameter fibers is necessary for low-loss transmission fiber. Clearly, it would be easier to create constant diameter fibers by starting out with constant diameter ~~(final, sintered)~~ preforms.

As to the new claims which require a specific variations: it would have been obvious to have the variations as small as possible – so as to maximize the known benefits.

***Response to Arguments***

Applicant's arguments filed 30 August 2005 have been fully considered but they are not persuasive.

It is argued that Suto does not teach the diameter variation pertains to the cladding layer and thus it is not relevant to the overcladding layers. Examiner disagrees. Suto teaches the outer diameter of the preform matters – thus it is deemed that it would matter to any preform with an outer diameter. Applicant's assertions that such is not relevant is mere conjecture – with no evidence or rationale to support it. An over cladding is still a portion of the cladding. To say that the diameter of a cladding is relevant when it is a single layer (but not when it comprises two layers) does not appear to be reasonable unless some evidence is supplied to support this assertion. See col. 1, lines 34-35, col. 2, lines 14-15; col. 9, lines 3-6 of Suto which clearly relates to the outer diameter of the preform.

As to the rejection based on Berkey as the primary reference, Applicant argues that since Berkley does not teach the variation limitation, the rejection is not proper. The rejection is clear as to why such would have been obvious: size/shape is usually not a patentable invention. See rejection. The idea of tight tolerances/variations is well known. Applicant's invention of a tight tolerance does not warrant a patent. Unless applicant supplies proper evidence of an over riding secondary consideration. NO such evidence exists in the present record.

Art Unit: 1731

Regarding Koenig, Imoto and Karbassiyoono: examiner has considered the arguments, but does not understand their relevance. It appears that Applicant attempts to show that a particular combination of the references does not result in and/or does not teach the claimed invention. This is largely irrelevant. The rejection does not indicate that that all possible combinations of the prior art teachings result in the claimed invention. Rather, the rejection merely indicates that the particular combination – AS SET FORTH IN THE REJECTION – would have been obvious. Since applicant has not pointed out how the particular combination/rationale is improper – it is presumed that Applicant could make no showing that the particular combination/rationale is improper.

As indicated above, Applicant is correct in pointing out that Fleming's distances is not from the center of the preform – but from the core periphery. This argument is not persuasive. Fleming still teaches what Applicant teaches: symmetry is very important. Applicant has not shown that the particular degree of symmetry produces any new and unexpected result.

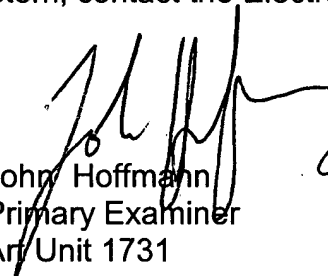
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John Hoffmann  
Primary Examiner  
Art Unit 1731

9-22-05

jmh